**Advanced Algebra – Ch. 1 Review Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_hr\_\_\_**

**Multiple Choice.**

**\_\_\_\_\_\_1.** Which number is not a solution of the inequality ?

a. 4 b. -1 c. ½ d. 0

**\_\_\_\_\_\_2.** Which number is not a solution of the equation ?

a. 5 b. 0 c. -5 d. -10

**\_\_\_\_\_\_3.** Which of the following equations have more than one solution?

1. 
2. 
3. 
4. 

a. I and II only b. I and III only c. II and III only d. I, II, III, and IV

**Solve. Be sure to show all solutions.**

**4.**  **5.**  **6.** 

**Solve.**

**7.** The total length of three strings is 26 inches. The first string is twice the length of the second. The third string is one-fourth the length of the second. Find the lengths of the three strings.

*Define the variable(s)* *Write and Solve an Equation Answer the question*

**8.** The length of a rectangle is 5 cm greater than its width. The perimeter is 106 cm. Find the dimensions of the rectangle.

*Define the variable(s)* *Write and Solve an Equation Answer the question*

**9.** The sides of a triangle are in the ratio 3:4:6. What is the length of each side if the perimeter is 104 cm?

*Define the variable(s)* *Write and Solve an Equation Answer the question*

**10.** Find 3 consecutive odd integers such twice the sum of the first and third integers is twenty-one more than the second integer.

*Define the variable(s)* *Write and Solve an Equation Answer the question*

**Solve and graph each inequality.**

**11.**  **12.** 

**13.**  **14.** 

**15.**  **16.** 

**17.**  **18.** 

**Solve. Be sure to show all solutions. Check for extraneous solutions.**

**19.**  **20.** 

**21.**  **22.** 

**Solve and graph each inequality.**

**23.**  **24.** 

**25.**  **26.** 